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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,377	11/12/2003	Erol Bozak	09700.0012-00	6379
60668 7590 10/15/2008 SAP / FINNEGAN, HENDERSON LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413				
EXAMINER DASGUPTA, SOUMYA				
ART UNIT		PAPER NUMBER		
2176				
MAIL DATE		DELIVERY MODE		
10/15/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/706,377

**Applicant(s)**

BOZAK ET AL.

**Examiner**

SOUMYA DASGUPTA

**Art Unit**

2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 8-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12 is/are allowed.
- 6) ☒ Claim(s) 8-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date 7/23/2008
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

***Applicant's Response***

In the applicant's response for application 11/082,700 dated 6/12/2008, the applicant added new Claims 8-13; and cancelled Claims 1-7; and argued against all the rejections and objections.

The rejections set forth under 35 USC 103(a) for Claims 1-7 are withdrawn because the applicant cancelled the claims.

The rejections set forth under Provisional Non-Statutory Double Patenting for Claims 1-5 and 7 are withdrawn because the applicant amended the claims to overcome the rejections.

Claims 8-13 are currently pending and have been considered below. Claim 8 is the independent claim.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 8-13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the Specification in such a way as to reasonably convey to

one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

*Claims 8-13:*

Claim 8 recites the limitation "*receiving, at the grid manager, in response to the first query, resources of the inferior grid managers that meet the resource requirement and are available, **the resources including ADDRESSES of the inferior grid managers***" [emphasis added] (see Lines 8-11). There is **no** mention in the original Specification of "*receiving,*" at the grid manager, "*resources*" that include addresses of the inferior grid managers. While the Specification does disclose "inferior" grid managers sending lists of resources meeting the "resource requirements" to a "superior" grid manager (see Page 6, Lines 26-30), the Specification says **nothing** about those lists of "resources" including addresses of the inferior grid managers.

Rather, the Specification simply mentions the "superior" grid manager sending the lists "*along with addresses of their corresponding [\"inferior\"] grid managers*" (see Page 7, Lines 10-12). The Specification does **not** state that the "lists" sent from the "inferior" grid managers and received at the "superior" grid manager includes addresses of the "inferior" grid managers.

Because Claims 9-13 depend upon Claim 8, these claims have the same problem.

If the examiner has overlooked the portion of the original Specification that describes this feature of the present invention, then Applicant should point it out (by page number and line number) in the response to this Office Action.

Applicant may obviate these rejections by canceling the claims.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

*Claims 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitchell et al (US 6,628,304; Patent Issue Date: Sep 30, 2003; Patent Filing Date: Dec 9, 1998; Prior Publication (US 2002/0113816) Date: Aug 22, 2002) in view of IBM Redbooks (Reference U – "Fundamentals of Grid Computing"; Copyright Nov 2002; hereafter IBM).*

**Claim 8:**

Mitchell discloses a computer-implemented method of sharing resources, the

**method comprising: receiving, at a network manager, a resource requirement from an application manager;** (Fig 2; Col 12, lines 29-61 → Mitchell discloses "receiving, at a network manager, a resource requirement from an application manager" in that the network management software queries actual data communication and computer devices.)

**sending a first query from the network manager to inferior network managers that are inferior to the network manager, the first query including the resource requirement;** (Fig 3 - 6; Col 12, lines 29-61 → Mitchell discloses "sending a first query from the grid manager to inferior grid managers that are inferior to the grid manager, the first query including the resource requirement" in that the network management software queries actual data communication and computer devices. The hierarchical GUI in Figs 3-6 discloses inferior and superior nodes that represent objects in a network.)

**receiving, at the network manager, in response to the first query, resources of the inferior network managers that meet the resource requirement and are available, the resources including addresses of the inferior network managers;** (Fig 3 - 6; Col 12, lines 29-61 → Mitchell discloses "receiving, at the grid manager, in response to the first query, resources of the inferior grid managers that meet the resource requirement and are available, the resources including addresses of the inferior grid managers" in that the network management software queries actual data

communication and computer devices. The information communicated includes status information and therefore the addresses are included. The hierarchical GUI in Figs 3-6 discloses inferior and superior nodes that represent objects in a network.)

**adding the resources of the inferior network managers to a resource list;** (Fig 3 - 6; Col 12, lines 29-61 → Mitchell discloses “adding the resources of the inferior network managers to a resource list” in that the network management software queries actual data communication and computer devices. The information communicated includes status information and therefore the addresses are included. The hierarchical GUI in Figs 3-6 discloses inferior and superior nodes that represent objects in a network. The information is stored in a stack or queue in the memory which is functionally equivalent to a list.)

**and sending the resource list from the grid manager to the application manager.** (Fig 3 - 6; Col 12, lines 29-61 → Mitchell discloses “sending the resource list from the grid manager to the application manager” in that the network management software queries actual data communication and computer devices. The information communicated includes status information and therefore the addresses are included. The hierarchical GUI in Figs 3-6 discloses inferior and superior nodes that represent objects in a network.)

Mitchell does not appear to explicitly disclose hierarchical structured network and nodes as **grid nodes**, and networks and managers as **grid networks** and **grid managers**, computer applications as **computer grid applications** and a network layout as a **computer grid** layout.

IBM discloses hierarchical structured network and nodes as **grid nodes**, and networks and managers as **grid networks** and **grid managers**, computer applications as **computer grid applications** and a network layout as a **computer grid** layout and **resource requirements**. (pgs 4-25 → IBM discloses a system with the nodes that are used in a grid computing network. The nodes can represent clients, servers, and other components of a network system. IBM discloses "resource requirements" in that grid management system delegate tasks and multiple applications throughout the system.)

Mitchell and IBM are analogous art because they are from the same field of endeavor of networking.

At they time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Mitchell and IBM before him or her, to incorporate a hierarchical GUI that contains servers and other computes together in a network environment, as disclosed by Mitchell, with grid computing system, as disclosed by IBM.



Since grid network is a type of computer network, the motivation for doing so would have been to allow a user to view a network on a GUI.

Therefore, it would have been obvious to combine IBM with Mitchell to obtain the invention as specified in the instant claim.

**Claim 9:**

Claim 9 corresponds to Claim 8.

**Claim 10:**

Mitchell and IBM disclose the limitations of Claim 8.

Mitchell discloses **determining whether the resource list is empty**; (Fig 3 - 6; Col 12, lines 29-61 → Mitchell discloses “determining whether the resource list is empty” in that the network management software queries actual data communication and computer devices. The information communicated includes status information and determines if there is a null value.)

**and if the resource list is empty, sending a second query to superior network managers that are superior to the network manager, the second query including**

**the resource requirement.** (Fig 3 - 6; Col 12, lines 29-61 → Mitchell discloses "if the resource list is empty, sending a second query to superior network managers that are superior to the network manager, the second query including the resource requirement" in that the network management software queries actual data communication and computer devices. The hierarchical GUI in Figs 3-6 discloses inferior and superior nodes that represent objects in a network.)

Mitchell does not appear to explicitly disclose hierarchical structured network and nodes as **grid nodes**, and networks and managers as **grid networks** and **grid managers**, computer applications as **computer grid applications** and a network layout as a **computer grid** layout.

IBM discloses hierarchical structured network and nodes as **grid nodes**, and networks and managers as **grid networks** and **grid managers**, computer applications as **computer grid applications** and a network layout as a **computer grid** layout and **resource requirements**. (pgs 4-25 → IBM discloses a system with the nodes that are used in a grid computing network. The nodes can represent clients, servers, and other components of a network system. IBM discloses "resource requirements" in that grid management system delegate tasks and multiple applications throughout the system.)

Mitchell and IBM are analogous art because they are from the same field of endeavor of networking.

At they time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Mitchell and IBM before him or her, to incorporate a hierarchical GUI that contains servers and other computes together in a network environment, as disclosed by Mitchell, with grid computing system, as disclosed by IBM.

Since grid network is a type of computer network, the motivation for doing so would have been to allow a user to view a network on a GUI.

Therefore, it would have been obvious to combine IBM with Mitchell to obtain the invention as specified in the instant claim.

**Claim 11:**

Mitchell and IBM disclose the limitations of Claim 8.

Mitchell discloses receiving **a resource reservation request from the application manager, the resource reservation request including a requested resource; determining whether the requested resource is available; and if the requested resource is available, then allocating the requested resource to the application**

**manager and sending a reservation number to the application manager.** (Fig 2 - 6; Col 12, lines 29-61 → Mitchell discloses "if the resource list is empty, sending a second query to superior network managers that are superior to the network manager, the second query including the resource requirement" in that the network management software queries actual data communication and computer devices. The hierarchical GUI in Figs 3-6 discloses inferior and superior nodes that represent objects in a network. The information communicated includes status information and therefore the addresses are included. The examiner notes that the limitation discloses standard communication between objects (servers, clients, devices, etc) in a network.)

Mitchell does not appear to explicitly disclose hierarchical structured network and nodes as **grid nodes**, and networks and managers as **grid networks** and **grid managers**, computer applications as **computer grid applications** and a network layout as a **computer grid** layout.

IBM discloses hierarchical structured network and nodes as **grid nodes**, and networks and managers as **grid networks** and **grid managers**, computer applications as **computer grid applications** and a network layout as a **computer grid** layout and **resource requirements**. (pgs 4-25 → IBM discloses a system with the nodes that are used in a grid computing network. The nodes can represent clients, servers, and other

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components of a network system. IBM discloses "resource requirements" in that grid management system delegate tasks and multiple applications throughout the system.)

Mitchell and IBM are analogous art because they are from the same field of endeavor of networking.

At they time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Mitchell and IBM before him or her, to incorporate a hierarchical GUI that contains servers and other computes together in a network environment, as disclosed by Mitchell, with grid computing system, as disclosed by IBM.

Since grid network is a type of computer network, the motivation for doing so would have been to allow a user to view a network on a GUI.

Therefore, it would have been obvious to combine IBM with Mitchell to obtain the invention as specified in the instant claim.

**Claim 12:**

Mitchell and IBM disclose the limitations of Claim 11.

Mitchell discloses **receiving an application file from the application manager; and installing an application server using the application file, the application server utilizing the requested resource.** (Col 18, lines 27-38 → Mitchell discloses "receiving an application file from the application manager; and installing an application server using the application file, the application server utilizing the requested resource" in that programs may access database hierarchically and the data may be transmitted to another computer system, thus installing the necessary software. The information communicated includes status information and therefore the addresses are included.)

Mitchell does not appear to explicitly disclose hierarchical structured network and nodes as **grid nodes**, and networks and managers as **grid networks** and **grid managers**, computer applications as **computer grid applications** and a network layout as a **computer grid** layout.

IBM discloses hierarchical structured network and nodes as **grid nodes**, and networks and managers as **grid networks** and **grid managers**, computer applications as **computer grid applications** and a network layout as a **computer grid** layout and **resource requirements**. (pgs 4-25 → IBM discloses a system with the nodes that are used in a grid computing network. The nodes can represent clients, servers, and other components of a network system. IBM discloses "resource requirements" in that grid management system delegate tasks and multiple applications throughout the system.)

Mitchell and IBM are analogous art because they are from the same field of endeavor of networking.

At they time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Mitchell and IBM before him or her, to incorporate a hierarchical GUI that contains servers and other computes together in a network environment, as disclosed by Mitchell, with grid computing system, as disclosed by IBM.

Since grid network is a type of computer network, the motivation for doing so would have been to allow a user to view a network on a GUI.

Therefore, it would have been obvious to combine IBM with Mitchell to obtain the invention as specified in the instant claim.

*Claims 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitchell et al (US 6,628,304; Patent Issue Date: Sep 30, 2003; Patent Filing Date: Dec 9, 1998; Prior Publication (US 2002/0113816) Date: Aug 22, 2002) in view of IBM Redbooks (Reference U – “Fundamentals of Grid Computing”; Copyright Nov 2002; hereafter IBM) in further view of Arming et al (US 2001/0054034; PG Pub Date: Dec 20, 2001; Patent Filing Date: May 4, 2000; hereafter Arming).*

**Claim 13:**

Mitchell and IBM disclose the limitations of Claim 8.

Mitchell discloses a hierarchical GUI landscape with inferior and superior objects on a network management system. (Figs 3-6)

Mitchell does not appear to explicitly disclose hierarchical structured network and nodes as **grid nodes**, and networks and managers as **grid networks** and **grid managers**, computer applications as **computer grid applications** and a network layout as a **computer grid** layout.

IBM discloses hierarchical structured network and nodes as **grid nodes**, and networks and managers as **grid networks** and **grid managers**, computer applications as **computer grid applications** and a network layout as a **computer grid** layout and **resource requirements** and a network landscape as a **grid landscape**. (pgs 4-25 → IBM discloses a system with the nodes that are used in a grid computing network. The nodes can represent clients, servers, and other components of a network system. IBM discloses "resource requirements" in that grid management system delegate tasks and multiple applications throughout the system.)

Mitchell and IBM do not appear to explicitly disclose **displaying a matrix representing a landscape on a display device, the matrix comprising: rows representing the**



**inferior objects and superior objects, the rows being arranged in a tree structure based on hierarchical relationships among the objects, the inferior objects, and the superior objects; and columns representing the object, the inferior objects, and the superior objects.**

Arning discloses **displaying a matrix representing a landscape on a display device, the matrix comprising: rows representing the inferior objects and superior objects, the rows being arranged in a tree structure based on hierarchical relationships among the objects, the inferior objects, and the superior objects; and columns representing the object, the inferior objects, and the superior objects.** (Figs 3-7 → Arning discloses this limitation in that a 3D hierarchical matrix structure is used to represent relationship between different objects.)

Mitchell, Arning, and IBM are analogous art because they are from the same field of endeavor of networking.

At they time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Mitchell and IBM before him or her, to incorporate a hierarchical GUI that contains servers and other computes together in a network environment, as disclosed by Mitchell, with grid computing system, as disclosed by IBM, and with a 3D matrix mapping system, as disclosed by Arning.

Since grid network is a type of computer network, the motivation for doing so would have been to allow a user to view a network on a GUI.

Therefore, it would have been obvious to combine Arning and IBM with Mitchell to obtain the invention as specified in the instant claim.

### ***Response to Arguments***

#### **Claims (8-13) Rejected under 35 USC 103(a):**

The applicant argues that Vaid et al (US 2004/0268147) does not disclose the limitations of Claim 8. Applicant's arguments, see pages 5-7, filed 7/23/2008, with respect to the rejection(s) of claim(s) 8-13 under 35 USC 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Mitchell in view of IBM Redbooks.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SOUMYA DASGUPTA whose telephone number is (571)272-7432. The examiner can normally be reached on M-Th 9am-7pm, F 9am-1pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Hutton can be reached on 571-272-4137. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SD

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